

Amendment under 37 C.F.R. §1.111  
Attorney Docket No. 062572  
Application No. 10/585,141

**AMENDMENTS TO THE DRAWINGS**

Figs. 1 and 4 are amended herein. Fig. 1 has been amended to position the indication arrow as properly designating the film. Fig. 4 has been amended by removing Kanji characters from the drawing.

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### **REMARKS**

Claims 2, 3, 5, 6, and 10 are pending in the present application. Claims 2, 3, 5 and 6 are herein amended. Claims 1, 4 and 7-9 are herein canceled without prejudice or disclaimer. New claim 10 has been added. No new matter has been presented.

### **Correction to Figures**

Although not objected to applicants have corrected informalities within the figures as noted above. Applicants respectfully submit that no new matter has been entered.

### **Applicants' Response to the Claim Rejections under 35 U.S.C. §112**

**Claim 5 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite on the basis that the claim language utilizes “the” for non-previously identified terms and refers to “the laminate” without including the identifying adjectives “flexible metal-clad” there before.**

In response thereto, applicants have amended claim 5 as suggested by the Examiner.

### **Applicants' Response to the Claim Rejections under 35 U.S.C. §102**

**Claims 1-2, 4, 6, and 8 are rejected under 35 U.S.C. §102(a) or (e) as being anticipated by Dunbar et al (US 2004/0126600 A1).**

In response thereto, applicants respectfully submit that Dunbar does not anticipate the present invention as now claimed for at least the reason that Dunbar does not provide for each and every feature of the claimed invention.

Specifically, Dunbar at least fails to provide for the feature of fixing both ends of the gel film nor the film being transported in a state loosened in the TD direction such that a distance between from one fixed end to a second fixed end of said both ends of gel film is smaller than a width of the film in parent claim 6 as now presented.

The rejection primarily relies upon the disclosure describing the formation of the polyimide film of Dunbar from paragraph [0050] to [0068] and the description of the formation of the flexible circuit board at paragraphs [0069] to [0074].

Under U.S. law, rejections under 35 U.S.C. §102 require that the Examiner distinctly provide for all the features of the claimed invention. "[U]nless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102." *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008).

First, as to the fixing both ends of the gel film, paragraph [0061] of Dunbar does describe that the film is unsupported and transported by pulling the film in the MD direction. There is no clear description that both ends of the gel film are fixed in such a manner so as to allow the film to be loosened in the TD direction. As described at paragraphs [0050] to [0053] of the current application, the film is fixed at both ends in a manner that allows for the loosening in the TD

direction. As stated at paragraph [0052]: “[u]ssually, a film is tight with tension, and the distance between the fixed ends of the film is equal to the film width between both end-fixing points.” This appears to be the case with the process of Dunbar which states that the film is pulled so as to stretch in the MD direction during the first curing. Paragraph [0061] of Dunbar. Thus, there is no loosening in the TD direction. Contrary, as set forth in paragraphs [0052] and [0053] of the present specification “the distance between the fixed ends of the film is different from the film width, the distance between the fixed ends being smaller.”

As noted above, Dunbar does not specifically provide for the ends being loosened in this manner. Rather, Dunbar requires tension so as to stretch the film in the MD direction during the first curing process.

Wherefore, applicants respectfully submit that the present invention as now set forth in parent claim 6 and its respective dependent claims, is not provided for in the disclosures of Dunbar.

**Applicants’ Response to the Claim Rejections under 35 U.S.C. §102/103**

**Claims 3, 5, 7 and 9 are rejected under 35 U.S.C. 102(a) or (e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dunbar et al (US 2004/0126600.)**

Applicants respectfully submit that as these claims depend from parent claim 6, by addressing the rejection of the parent claim as detailed above, likewise these rejections should be considered addressed by nature of their dependency.

Furthermore, claim 6 as now asserted contains the feature of “laminating a metal foil with a thermal roll laminator including at least one pair of metal rollers,” which is not described in Dunbar. The rejection acknowledges that Dunbar fails to recite such a thermal roll laminator including at least one pair of metal rollers Page 3, lines 16-19 of the Office Action. As stated therein: “the Examiner takes the position that the film and laminate taught by Dunbar would inherently possess these same properties given that the materials and method of producing the film and laminate as taught by Dunbar appear to be the same as the instant invention, or similar enough for these properties to have been obvious to one having ordinary skill in the art at the time of the invention.” However, applicants respectfully submit that Dunbar does not provide for this aspect of the present invention nor is it inherent to the disclosures thereof.

Specifically, a polyimide film oriented in the MD direction is obtained by carrying out the steps (A) to (C), which are not described in Dunbar, of the method for producing a flexible metal-clad laminate according to the present invention as now set forth in claim 6. When a metal foil is laminated to the polyimide film, which is used as a core film, by a thermal lamination method, the difference between a thermal stress occurring in the MD direction and a thermal stress occurring in the TD direction of the adhesive film is suppressed, and a flexible metal-clad laminate in which a change in dimensions is suppressed can be obtained (see paragraph [0056] of the present patent application publication (US 2008/0050585 A1). The flexible metal-clad laminate thus obtained by the present invention can solve conventional problems (poor connections between components and boards) caused by a change in dimensions occurring in the

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step of etching the metal foil and a change in dimensions occurring the subsequent heating step (see paragraph [0007] of the present patent application publication (US 2008/0050585 A1)).

Wherefore, applicants respectfully submit that there is no manner whereby a skilled artisan can derive this aspect of the claims now presented in parent claim 6.

#### **Applicants' Response to the Double Patenting Rejection**

**Claims 1-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8-10, 13, 16, and 17 of copending Application No. 11/663,622.**

In response thereto, applicants have filed herewith a Terminal Disclaimer to Application No. 11/663,622. Wherefore, applicants respectfully submit that the rejection is now moot.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

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If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

**WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP**

A handwritten signature in black ink, appearing to read "Michael J. Caridi", is written over the printed name.

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Enclosures: Terminal Disclaimer for Application No. 11/663,622  
Corrected Drawings, Figs. 1 and 4